

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF NEW YORK

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BRAINWAVE SCIENCE, INC.

Plaintiff,

- against -

21-cv-4402 (BMC)

ARSHEE, INC., DR. LAWRENCE A. FARWELL,  
DR. THIERRY MAISON and BRAIN  
FINGERPRINTING FOUNDATION  
Defendants.

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**Krishna Ika**, pursuant to 28 U.S.C. § 1746 declares under penalty of perjury that the following is true and correct:

1. I am the President and Chief Executive Officer of Brainwave Science, Inc. (“Brainwave”). I make this affidavit in support of Brainwave’s motion for a temporary restraining order and a preliminary injunction.

2. Brainwave is bringing this motion for a temporary restraining order and preliminary injunction, because without an order granting the requested relief, Brainwave will be irreparably harmed in a way that money cannot fix.

3. As outlined within Brainwave's Complaint filed August 5, 2021 ("Plaintiff's Complaint"), Brainwave has developed a technology which we hope will assist authorities in conducting humane questioning and interrogation of suspects and exonerating wrongfully accused or convicted persons. Our technology ("iCognitive®") allows an investigator to detect and measure brainwaves which appear in a test subject's brain demonstrating recognition of stimuli ("P300 Brainwaves"). When properly administered, this test allows investigators to ascertain whether particular information or stimuli is or is not present within a test subject's brain.

4. Defendant Dr. Lawrence Farwell ("Farwell") was employed by Brainwave's predecessor in interest, Brainwave Science, LLC ("BWS, LLC") as Chief Scientific Officer from 2012 until November 2016. Farwell conveyed several patents related to P300 technology to BWS, LLC in 2013.

5. In or about May or June of 2016, BWS LLC Members and their business associates received undated letters from a Dr. Nash O. Thompson, the purported President of Life Science and Technology, LLC. (hereinafter "LST"). Neither BWS LLC nor its management had any prior dealings with LST or Dr. Thompson. Within these letters, LST alleged, among other things, that LST was the rightful owner of the afore-referenced patents. The correspondence made numerous demands regarding BWS LLC's use of the technology and indicated that, once the demands have been met, LST and BWS LLC would be in a position to negotiate a "solution" to include "appropriate damages to be paid by BWS to LST for unauthorized use of [LST's] technology..."

6. During the course of its subsequent investigation, BWS LLC management learned that Farwell, without the knowledge or consent company management, had covertly attempted to transfer the afore-referenced patents, nearly three years prior, by way of a purported “Corrected” assignment dated October 31, 2013. Farwell subsequently admitted to, among other things a) orchestrating the attempted surreptitious reassignment, b) collecting substantial salary payments from BWS, LLC for nearly three years following this surreptitious attempted reassignment for his work in developing technology based upon the patents and c) “ghost writing” the afore-referenced demand letter from Nash Thompson on behalf of LST.

7. In or about November of 2016, BWS, LLC membership voted to remove Farwell from BWS, LLC for fraud. After his removal from BWS, LLC, Farwell published defamatory statements about Brainwave, including assertions that Brainwave did not hold legal title to the afore-referenced patents. Brainwave subsequently initiated a declaratory action in New York State. That action remains pending. The subject patents have since expired.

8. Defendant Dr. Thierry Maison (“Maison) served as the Chief Technology Officer for Brainwave from June 2013 to February 2019. Maison led our Development Team’s efforts in overseeing all software development activities including designing, managing and refining the algorithms used by our system. Maison served as the chief architect for our iCognitive® product.

9. The concept of using P300 “brainwaves” to determine the presence or absence of information within a subject’s brain is not proprietary to Brainwave. P300 brainwave testing is the subject of several now-expired patents, including the afore-referenced now-expired patents conveyed by Farwell to BWS,

LLC, and have been addressed within numerous publicly available scientific studies and journal publications.

10. The challenge in developing and marketing any P300 based system lies not within the concept of P300 measurement itself but in creating a system which, among other things,

- a) prompts testing personnel for appropriate stimuli;
- b) displays stimuli to testing subjects in optimal order and at optimal intervals;
- c) captures appropriate P300 brainwave responses;
- d) disregards and/or eliminates extraneous responses (“noise”) which may produce false positive or false negative results;
- e) detects and disregards any attempted countermeasures by suspects or others involved in conducting testing;
- f) performs appropriate analysis of P300 measured responses utilizing statistical and machine learning algorithms and Artificial Intelligence;
- g) generates unbiased reports for use by examiners, investigating agencies and legal authorities.

11. Brainwave has expended substantial time and resources to address the afore-referenced challenges by developing proprietary software code, user interfaces, algorithms and hardware (“Brainwave Trade Secrets”) to create a system that is accurate, scalable and more-readily utilized by field investigators without extensive scientific training.

12. As Brainwave’s Chief Software Architect, Maison played an integral role in the development and refinement of the “Brainwave Trade Secrets”. In order to fulfill his role, Maison had full access to all facets of the Brainwave Trade Secrets during his employment with Brainwave.

13. As outlined within its Complaint, Brainwave took substantial measures to protect the Brainwave Trade Secrets. These measures included, but were not limited to, maintaining and operating all code relating to its Trade Secrets on secure cloud-based servers to avoid potential copying by clients and competitors. The physical security precautions at Brainwave's physical office location included visitor control systems, alarming/self-locking doors and twenty-four live security personnel. Brainwave has also required that all employees, vendors, sales partners and potential clients execute confidentiality and non-disclosure agreements prior to viewing or operating our system.

14. In or about September 2013, Maison entered into an Employment Agreement, Non-Disclosure and Non-Competition Agreement and Confidentiality and Rights Agreement. Paragraphs 5 and 6 of the Non-Disclosure and Non-Competition Agreement provide that all inventions, "know-how" etc. developed by Maison in the course of his employment remain the property of our company.

15. Maison entered into a Separation Agreement in February of 2019. That agreement contains several covenants regarding non-solicitation and confidentiality but explicitly indicates that it does not limit the substance or scope of the afore-mentioned Employment, Non-Disclosure and Non-Competition and Confidentiality Agreements.

16. In July of 2020, Brainwave's outside counsel forwarded a dunning notice from a manufacturer of headset and other peripherals. The dunning notice was directed to Farwell and Maison jointly. The sender had mistakenly believed that our counsel represented Farwell. The dunning notice indicates that Farwell, Maison and their respective companies were acting in concert in ordering components necessary to develop a P300-related system. A true and accurate copy of that email correspondence is attached hereto as **Exhibit A**.

17. In April 2021, Brainwave submitted final documents to bid on a tender for sale of its iCognitive® system to a law enforcement agency in Bangladesh. Brainwave was advised by its Bangladesh sales partner that Farwell submitted a competing bid to the same Bangladesh agency in conjunction with Defendant and New York company, Arshee, Inc ("Arshee") and non-party Bangladeshi company Tracer Electrocom ("Tracer").

18. Brainwave received reports from its sales partner that the user interface utilized by Farwell's and Arshee's product was identical to the interface designed and implemented by Maison during his employment with Brainwave.

19. Brainwave's technology team members subsequently located an online demonstration video made by Farwell in August 2019. In the video, Farwell is seen demonstrating a system with a nearly identical user interface to that designed by Maison for BWS. A true and accurate screenshot showing a side-by-side comparison of the user interfaces is attached hereto as **Exhibit B**.

20. On June 28, 2021, upon being confronted with the findings of Brainwave's initial investigation of the theft of the Brainwave Trade Secrets, Maison admitted to, and provided evidence of, his transfer of the Brainwave Trade Secrets to Farwell. Said evidence included access to the repository (<https://dev.azure.com/NeuroDyneLabs/NeuroDyne>). Maison admitted that "a complete dump of the repository was created and shared via a Google drive" with Farwell. Maison provided access to the Google drive used by him to share the afore-referenced code with Farwell. A true and accurate copy of Dr. Maison's June 28, 2021 email is attached hereto as **Exhibit E**.

21. Brainwave did not authorize Maison to transfer the Brainwave Trade Secrets to Farwell or any other person or entity. Maison's use and disclosure of the BWS Trade Secrets was against BWS' express instructions to, and agreement with, Maison.

22. Brainwave's development team subsequently utilized a Code Similarity Checker, Codequiry®, to perform a "Measure Software Similarity" analysis to confirm whether and/or the degree to which Farwell's "Brain Fingerprinting" software is copied from BWS' iCognitive®. Codequiry's analysis indicates a 98-99% likelihood of "plagiarism" by Farwell's software. A true and accurate copy of the Codequiry® comparison generated by our development team is attached hereto as **Exhibit C**.

23. As would be expected, given the degree of plagiarism by Farwell's application, the user interfaces of Farwell's "Brain Fingerprinting" software are also nearly identical to the interfaces designed and implemented by Maison during his employment with Brainwave. A true and accurate copy of the side-by-side user interface comparison generated by our development team is attached hereto as **Exhibit D**.

24. Brainwave's business model involves sale of its systems by way of bids or "tenders" or "RFP" with international government agencies and vendors. Brainwave devotes substantial time and resources to preparing and submitting each individual bid. This process typically involves retaining local sales partners who, on a commission basis, assist Brainwave in making contact with local officials, submitting required documentation, procuring performance bonds and other guarantees, conducting demonstrations and preparing and ultimately submitting the final bid.

25. Defendants' theft of Plaintiff's trade secrets, and continued sale and attempted distribution of software embodying same, has caused, and will continue to cause, immediate and irreparable damage to Brainwave's goodwill with its sales partners.

26. Following its receipt of bids containing nearly identical software and user interfaces from Defendants and Brainwave, the aforementioned law enforcement agency in Bangladesh elected not to do business with either Brainwave or Defendants/Tracer. In addition to the loss of economic opportunity, this has resulted in a significant impairment of Brainwave's goodwill and potential for future business opportunities with the agency. It has also understandably caused substantial frustration on the part of Brainwave's Bangladeshi sales partner who expended substantial resources, and extended its own goodwill, in coordinating Brainwave's bid with the agency.

27. By email correspondence of October 20, 2021, I was advised by our Bangladeshi sales partner of an upcoming tender with another Bangladeshi agency for sale of a P300 system. Our sales partner has advised that Arshee, Inc. will again be participating in the tender process.

28. Absent intervention by this Court, Brainwave and its sales partner will necessarily sustain additional immediate and irreparable impairment to their respective goodwill with the Bangladeshi government and other international governments and agencies.

29. In addition to the forgoing, in the course of its investigation, Brainwave has also learned that one or more Defendants have also surreptitiously distributed or licensed copies of a system, incorporating the Brainwave Trade Secrets, to the Clinical Legal Studies Department at University of Canterbury, New Zealand and to the Forensic Science Laboratory for the Government of Delhi, India.



30. The foregoing instances are the examples Brainwave has discovered so far; it is likely these violations are only the tip of the iceberg in terms of Defendants' sale and distribution of software embodying Plaintiff's Trade Secrets.

31. The relief sought by Brainwave here is narrow. Brainwave is not asking this Court to enjoin Defendants from the sale of any software or from soliciting Brainwave's customers generally. Rather, Brainwave is only asking this court to (1) enjoin Defendants from the unauthorized possession, use, or disclosure of the Brainwave Trade Secrets; (2) direct Defendants to provide Brainwave with the names and contact information of all persons and entities with whom Defendants have disclosed the Brainwave Trade Secrets; (3) direct Defendants to recall all software embodying the Brainwave Trade Secrets and 4) to require, prior to demonstrating, selling or transferring any P300-related software, that Defendants obtain independent third-party confirmation that the software does not include any Brainwave Trade Secrets. This code comparison would be conducted by a mutually agreed-upon third party agency with mutually agreed-upon non-disclosure agreements in place to protect the confidentiality and trade secrets of the respective parties. Pending a final determination of the claims made within Brainwave's Complaint, Brainwave is amenable to covering the costs incurred in connection with the code comparison. It is respectfully submitted that this proposed relief is eminently reasonable under the circumstances.

32. I hereby declare under penalty of perjury that the foregoing is true and correct.

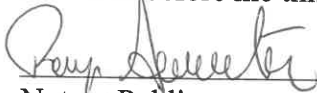
**Wherefore**, based upon the foregoing, the undersigned respectfully requests that the Court grant the relief set forth within the attached Order to Show Cause.

By Krishna Ika

Signature



Sworn to before me this 1 day of November, 2021.



Notary Public

